Identifying the "Fallers":
Comprehensive Fall Risk Assessment for Community Dwelling Older Adults

FOCUS 2012 Special Session: The Art and Science of Fall Prevention

Wednesday, November 28, 2012 2:30PM to 4 PM
Mindy O. Renfro, PT, PhD, DPT, GCS, CPH

Introductions

Mindy Oxman Renfro, PhD, DPT, GCS
School of Physical Therapy &
Rehabilitation Sciences
University of Montana
Missoula, MT 59812
Email: mindy.renfro@umontana.edu
Phone: (406) 243-2429

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Today's Objectives

By the conclusion of today's presentation, clinicians will be ready to:

1) Understand that fall risk and falls prevention is a multifactorial issue.
2) Recognize the pressing need to screen all older adults for fall risk BEFORE the first fall; and certainly after any falls.
3) Compare and contrast the FRAST and the STEADI and select the best tool for each setting.
4) Administer and score both the FRAST and the STEADI and follow-up on identified fall risks effectively.

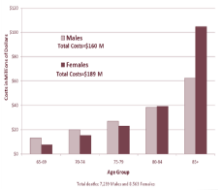
Definition of a Fall

- **A fall is defined as any event that leads to an unplanned, unexpected contact with a supporting surface.** (Shumway-Cook, 1997: *PHYS THER.* 1997; 77:812-819)
- Falls are the leading cause of unintentional injury for older adults.
- Falls are **vastly** under-reported. When you ask about falls, you must first define what a fall is for your patient.

Statistics and Costs of Falls

Epidemiology & Statistics

- More than 1/3 of adults aged 65 and older **report** a fall each year in the United States (Hornbrook,1994:The Gerontologist 1994:34(1):16–23.)
- Among older adults, falls are the leading cause of injury deaths. They are also the most common cause of nonfatal injuries and hospital admissions for trauma (CDC, 2005: www.cdc.gov/ncipc/wisqars)
- The rates of fall-related deaths among older adults ROSE significantly over the past decade (Stevens, 2006: Inj Prev 2006; 12:290-5).



http://www.cdc.gov/homeandrecreationalsafety/Falls/data.html

Outcomes Related to Falls

- **20-30% of falls result in an injury**
  (Inj Prev. 2005;11:115-119.)
- **Injuries are related to loss of independence and fear of falling which may further limit mobility**
  (Am J Epidemiol, 1996;143:1129-1136)
- **Falls are the most common cause of TBI**
  (Jager et al, 2000:Acad Emerg Med 2000; 359; 7(2): 134-140.)
- **People 75+ who fall are 4-5X more likely to be admitted to LTC for > 1 year**
  (Donald, Age and Ageing 1999;28:121–5)
- **In the U.S. the average cost of one year in LTC is over $80,000.00.**
  (www.genworth.com)

Cost of Falls

- In 2002, about 22% of community-dwelling seniors reported falling in the previous year. Medicare costs per fall averaged between $9,113 and $13,507.
- In 2000, falls among older adults cost the U.S. health care system over $19 billion dollars or $30 billion in 2010 dollars.
  http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallcost.html
  (Stevens, Journal of Forensic Science 1996;41(5):733–46.)
- By 2020, the annual direct and indirect cost of fall injuries is expected to reach $54.9 billion (in 2007 dollars).
  (Englander1996:http://journalsip.astm.org/jofs/PAGES/2448.htm)

Cost of Falls

- With the population aging, both the number of falls and the cost to treat fall injuries are expected to increase.
- Falls contribute to a multitude of negative consequences which include poor quality of life and possible death [2-4]
- Falls also pose a financial burden on the individual, their families, and society. [3,5]
- Personal losses are, of course, the greatest concern.

Fall Risk is Multifactorial

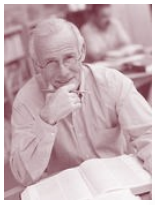
Prevention and Interventions MUST be **multifactorial** to be effective!

Each Profession Has Its Own Focus

- Physical Therapists think about balance, strength and endurance.
- Occupational Therapists think about environmental risks; especially in the home.
- Doctors and Pharmacists think about polypharmacy and/or possible drug interactions.
- Nurses think about incontinence and issues related to pain.
- Social workers think about support systems, mood and caregiver issues.
- Psychologists think about depression, anxiety, risk-taking behaviors and cognition….
- **FALLS ARE A RESULT OF MANY OF THESE RISK FACTORS WORKING IN CONCERT**

The Evidence is Strong: **Falls ARE Multifactorial**

- **"The Patient who falls: "It's always a trade-off"**
  (Tinetti, JAMA, 2010)
- **"Previous falls, strength, gait and balance impairments; and medications are the strongest risk factors for falling."**
- **"Evidence suggests that the most effective strategy for reducing the rate of falling in community-living older adults may be intervening on *multiple* risk factors."**



Multifactorial Causes of Falls

- It is widely accepted that falls are a multifactorial event resulting from multiple risk factors [2 10,11]
- We all need to understand that multifactorial does not mean an assortment of balance and gait assessments; but rather a very wide array of both intrinsic and extrinsic factors.
- Evidence regarding fall prevention supports:
  - Multifactorial falls prevention programs
  - Interventions should be individualized and aimed at specific risk factors [3,12,13,14]
- There is a need for a simple to administer, quick, multifactorial assessment tool to classify one's fall risk that also provides direction to the primary care practitioner for further assessment and/or targeted intervention [8,15]

Key Risk Factors

- Age
- Gender
- Previous falls in the past; especially in the past 6 months.
- Daily physical activity
- Number of medications and type
- Eye care:
  - Routine exams
  - Use of multifocal lenses
- Dizziness
- Assistive Device Use
  - Prescribed and Fit vs. Self adopted
- Risk Taking Behaviors
- Social contact and activities
- Home Safety
- Fear of Falling (MFES)
- Depression/Mood/Sleep (GDS or Mood Scale)
- Balance (TUG)

Measuring Fall Risk Objectively & Reliably

Using the FRAST and/or the STEADI to assess fall risk in community-dwelling older adults.

AGS Guidelines for Fall Mgmt.

SCREENING AND ASSESSMENT

1. **All older individuals should be asked whether they have fallen (in the past year).**
2. An older person who reports a fall should be asked about the frequency and circumstances of the fall(s).
3. Older individuals should be asked if they experience difficulties with walking or balance.
4. Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or report difficulties in walking or balance (with or without activity curtailment) should have a multifactorial fall risk assessment.
5. Older persons presenting with a single fall should be evaluated for gait and balance.
6. Older persons who have fallen should have an assessment of gait and balance using one of the available evaluations.
7. Older persons who cannot perform or perform poorly on a standardized gait and balance test should be given a multifactorial fall risk assessment.
8. Older persons who have difficulty or demonstrate unsteadiness during the evaluation of gait and balance require a multifactorial fall risk assessment.
9. Older persons reporting only a single fall and reporting or demonstrating no difficulty or unsteadiness during the evaluation of gait and balance do not require a fall risk assessment.
10. The multifactorial fall risk assessment should be performed by a clinician (or clinicians) with appropriate skills and training.

Please visit this link for the full guideline:
http://americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/prevention_of_falls_summary_of_recommendations

Administration of the FRAST & STEADI

- Both instruments have been shown to measure fall risk in **community-dwelling older adults**. They have NOT been validated for institutionalized older adults.
- Both instruments are primarily self-administered questionnaires. The FRAST includes a Timed –Up-and-Go (TUG) test o balance. The STEADI might include up to 3 balance tests.
- Both are intended for use by support staff with interpretation and f/u by a practitioner.
- Once released, the entire STEADI toolkit will contain many helpful tools.

FRAST Questionnaire[8]

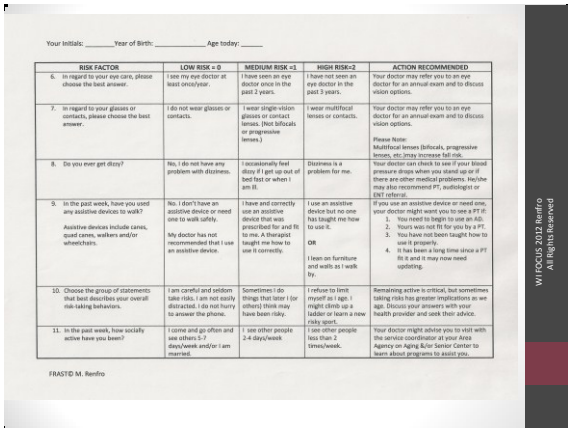
Your Initials: _____Year of Birth: _____ Age today: _____

Fall Risk Assessment & Screening Tool (FRAST) ©

Directions: For each question, please circle the box with the response that best represents you today. Whenever your responses are in the high or medium risk column, we strongly encourage you to discuss the recommended actions in the last column with your health care provider.

RISK FACTOR	LOW RISK = 0	MEDIUM RISK =1	HIGH RISK=2	ACTION RECOMMENDED
1. As of today, my age is	Below 65 years old	Between 65 and 75 years old	Over 75 years old.	Attending a fall prevention program may be recommended to lower your fall risk.
2. My gender is		Male	Female	
3. A fall is any event that led to an unplanned, unexpected contact with a supporting surface such as the floor. Have you fallen?	No, I have not fallen.	In the past six months, I have fallen only once and was NOT injured.	In the past 6 months I have fallen 2 or more times OR In the past 2 years, I have fallen and been injured requiring medical attention	People who have had falls or have balance issues are at greater risk for more falls. Your doctor may recommend a: 1. Full annual physical exam 2. Fall prevention program 3. PT evaluation for balance 4. PT or OT evaluation of home 5. PT or podiatrist evaluation of footwear 6. Home fall alarm system
4. How would you describe your daily physical activity level? This might be walking, an exercise class, working out at the gym, swimming or dancing. When you are active, your heart works harder and your breathing gets deeper.	I am engaged in exercise or moderate physical activity 30min. /day, 5-7 days/week.	I am engaged in exercise or moderate physical activity at least 15 min/day, 2-4X/week	I am generally not active and do not exercise in a way that makes my heart rate or breathing increase.	Your doctor may feel that you should begin to exercise, but before you do, s/he might suggest a physical therapy referral to design a safe, individualised program that meets your needs safely.
5. How many prescription medicines do you take?	I have not been prescribed any medications.	I currently take at least one but not more than 4 prescription medications.	I currently take 5 or more prescription medications.	It is recommend that 1. Your doctor and/or pharmacist review your medications carefully 2. That you use a weekly pill dispenser to avoid mistakes 3. Keep a list of your medicines with you in your wallet or purse.

FRAST© M. Renfro



Your Initials: _____Year of Birth: _____ Age today: _____

RISK FACTOR	LOW RISK = 0	MEDIUM RISK =1	HIGH RISK=2	ACTION RECOMMENDED
6. In regard to your eye care, please choose the best answer.	I see my eye doctor at least once/year.	I have seen an eye doctor once in the past 2 years.	I have not seen an eye doctor in the past 3 years.	Your doctor may refer you to an eye doctor for an annual exam and to discuss vision options.
7. In regard to your glasses or contacts, please choose the best answer.	I do not wear glasses or contacts.	I wear single-vision glasses or contact lenses. (Not bifocals or progressive lenses.)	I wear multifocal lenses or contacts.	Your doctor may refer you to an eye doctor for an annual exam and to discuss vision options. Please Note: Multifocal lenses (bifocals, progressive lenses, etc.)may increase fall risk.
8. Do you ever get dizzy?	No, I do not have any problem with dizziness.	I occasionally feel dizzy if I get up out of bed fast or when I am ill.	Dizziness is a problem for me.	Your doctor can check to see if your blood pressure drops when you stand up or if there are other medical problems. He/she may also recommend PT, audiologist or ENT referral.
9. In the past week, have you used any assistive devices to walk? Assistive devices include canes, quad canes, walkers and/or wheelchairs.	No. I don't have an assistive device or need one to walk safely. My doctor has not recommended that I use an assistive device.	I have and correctly use an assistive device that was prescribed for and fit to me. A therapist taught me how to use it correctly.	I use an assistive device but no one has taught me how to use it. OR I lean on furniture and walls as I walk by.	If you use an assistive device or need one, your doctor might want you to see a PT if: 1. You need to begin to use an AD. 2. Yours was not fit for you by a PT. 3. You have not been taught how to use it properly. 4. It has been a long time since a PT fit it and it may now need updating.
10. Choose the group of statements that best describes your overall risk-taking behaviors.	I am careful and seldom take risks. I am not easily distracted. I do not hurry to answer the phone.	Sometimes I do things that later I (or others) think may have been risky.	I refuse to limit myself as I age. I might climb up a ladder or learn a new risky sport.	Remaining active is critical, but sometimes taking risks has greater implications as we age. Discuss your answers with your health provider and seek their advice.
11. In the past week, how socially active have you been?	I come and go often and see others 5-7 days/week and/or I am married.	I see other people 2-4 days/week	I see other people less than 2 times/week.	Your doctor might advise you to visit with the service coordinator at your Area Agency on Aging &/or Senior Center to learn about programs to assist you.

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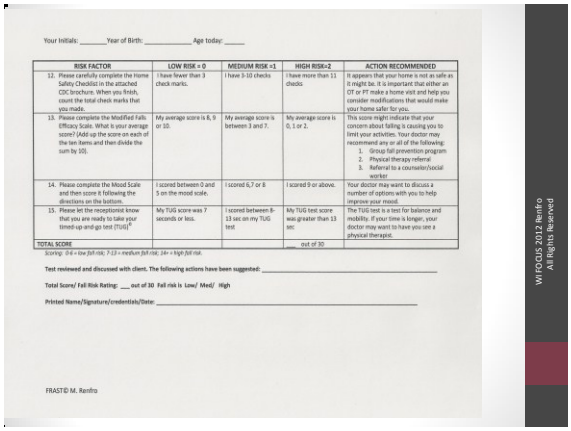


Your Initials: _____Year of Birth: _____ Age today: _____

RISK FACTOR	LOW RISK = 0	MEDIUM RISK =1	HIGH RISK=2	ACTION RECOMMENDED
12. Please carefully complete the Home Safety Checklist in the attached CDC brochure. When you finish, count the total check marks that you made.	I have fewer than 3 check marks.	I have 3-10 checks	I have more than 11 checks	It appears that your home is not as safe as it might be. It is important that either an OT or PT make a home visit and help you consider modifications that would make your home safer for you.
13. Please complete the Modified Falls Efficacy Scale. What is your average score? (Add up the score on each of the ten items and then divide the sum by 10).	My average score is 8, 9 or 10.	My average score is between 3 and 7.	My average score is 0, 1 or 2.	This score might indicate that your concern about falling is causing you to limit your activities. Your doctor may recommend any or all of the following: 1. Group fall prevention program 2. Physical therapy referral 3. Referral to a counselor/social worker
14. Please complete the Mood Scale and then score it following the directions on the bottom.	I scored between 0 and 5 on the mood scale.	I scored 6,7 or 8	I scored 9 or above.	Your doctor may want to discuss a number of options with you to help improve your mood.
15. Please let the receptionist know that you are ready to take your timed-up-and-go test (TUG)[8]	My TUG score was 7 seconds or less.	I scored between 8-13 sec on my TUG test	My TUG test score was greater than 13 sec	The TUG test is a test for balance and mobility. If your time is longer, your doctor may want to have you see a physical therapist.
TOTAL SCORE			out of 30	

Scoring: 0-4 = low fall risk; 7-13 = medium fall risk; 14+ = high fall risk.

Test reviewed and discussed with client. The following actions have been suggested: _____

Total Score/ Fall Risk Rating: ___ out of 30 Fall risk is Low/ Med/ High

Printed Name/Signature/credentials/Date: _____

FRAST© M. Renfro

FRAST Research Methods Summary

- The FRAST was tested for its validity (2010), inter-rater, and intra-rater reliability (2011).
- Forty-seven community dwelling, independently ambulatory (with or without an assistive device) adults age 65+ volunteered to participate in this study.
- Ten failed to complete the required second testing date and were not included in the study.
- Inter-rater reliability of the FRAST was determined by administering the measure to 16 volunteer participants by two different testers on two separate occasions.
- Intra-rater reliability of the FRAST was determined by administering the measure to 21 volunteer participants by one tester on two separate occasions.
- Validity was determined by testing over 100 volunteers and comparing FRAST score with history of falling.

Discussion

- FRAST was found to reliably discern between fallers and non-fallers in the target population.
- Findings suggest that the FRAST demonstrates good to excellent inter-rater reliability for the total scores between trials
- Findings demonstrate good to excellent intra-rater reliability for the total scores on the FRAST when issued to the participant by the same rater on two different occasions, under the same conditions

Administration of the FRAST

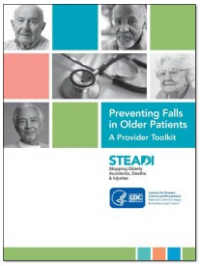
- Attach the FRAST to the chart of all patients coming for Medicare prevention visits **and** for all patients over the age of 65.
- While in the waiting room or during weigh in: Explain to your patient (verbally and in writing) that the medical practice is very concerned about preventing injuries due to falls in **all** older adults.
- Show the patient the forms.
- Offer to score the test for them.
- Direct them to read across each row, read the question in the first box, and select and circle the one box that BEST fits them as of today and for the past week. The FRAST can be verbally administered to the patient if needed.
- When they have circled the boxes, bring the paper back to the desk and you will have them do a quick balance test and score their FRAST for them.

TUG Test for Balance

- The Timed Up and Go Test is one of the "gold standards" for evaluating balance in older adults. (Shumway-Cook, 1997).
- It is simple to administer and also allows you to watch the patient walk, turn, follow verbal commands, and stand up and sit down.
- Research shows that it is also an indirect measure of cognitive function. (Herman, 2010)
- Offer to train your PCPs staff in performance of the TUG test.

Stretch Break

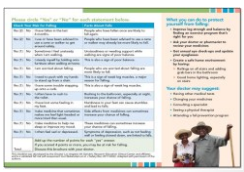
STEADI Toolkit



- STEADI is being developed by the CDC and is almost ready for release.
- Once released (Late 2012), the entire STEADI toolkit will be available at this website: www.cdc.gov/injury/STEADI
- This toolkit is designed to help all medical providers meet the AGS Fall Guidelines and effectively manage falls in their older adult patients.
- Mark your calendars to remind yourself to order these toolkits!

STEADI from the CDC

- The STEADI begins with a self-administered questionnaire available as an educational pamphlet and is then followed up with discussion and further testing per the clinician's judgment.



Administration of the STEADI

- The STEADI should be distributed just as described for the FRAST above.
- Scoring is described at the bottom of the questionnaire form. For each "yes" response, there are points assigned which are indicated next to the "yes". Add these points to obtain your total score.
- **A total score of 4 or more points on the STEADI is indication of the need for further investigation.**
- Why do both of these fall assessments use such a low cut-off score?

STEADI balance testing

- Like the FRAST, the STEADI recommends use of the TUG. It also includes three other evidence-based, objective measures of balance and mobility.
- Patients requiring a higher level of balance evaluation would best be served by a PT referral.
- Providers will need a PT referral list for your area.


STEADI

The 4-Stage Balance Test

Interventions to Reduce Fall Risk

Abating fall risk factors that can be altered.

What We Cannot Change

- Obviously, we are unable to change many basic intrinsic factors that significantly increase fall risk.
  - **Age**: As we age, our fall risk increases. Aging still beats the alternative. However, as care providers, we have to be keenly aware of this risk and aggressively abate those factors that can be impacted.
  - **Gender**: Women fall more often than men do and sustain more injuries. However, when men fall, they have a higher fatality rate.
  - **Previous Falls**: Hopefully, as we step-up prevention, we will prevent more "first" falls. However, once they have occurred, that history cannot be changed. Please, do not believe that fall prevention is only for those who have had a fall!

Recognizing that these unabatable risk factors exist is imperative in motivating both us and our patients to make changes where they are possible.

What We Do Change: Physical Activity

- How many chronic diseases would be prevented by more physical activity?
- **Physical activity is protective** for fall risk in older adults. (Howe, 2007)
- Educate that **simply moving** is effective! Do what you love to do!
- Exercise has been shown to **improve balance** in older adults.
- How do we motivate this difficult **behavioral change**?

Motivating Behavioral Change

- Elders are most successful with behavioral changes when educated in groups facilitated by **peer leaders**. (Peel, 2009)
- Consider referral to EBP's such as Otago, Stepping On, Matter of Balance, T'ai Chi, etc. (references on later slides)
- **Groups activities** that offer social support are more successful for most women such as mall walkers and fitness classes.
- **Home technology** such as Wii and Knect may be more successful for those men who are less socially motivated. This is also a great way to unite grandparents and grandchildren!

Facilitating Activity

- Assign a staff member or committee to **locate the best, local, fitness programs** available and create a handout for the office.
- The STEADI toolkit will include a form, but a list is just fine for now.
- Include how to **judge a good program** for an older adult.
- Ask your PCPs to consider **referrals to PT** to get people started safely; especially if frail, weak, in pain, or showing very prolonged TUG testing.
- For your frail older adults that are homebound or limited, the PT should always consider use of the **Otago Exercise Program.**
- Visit: http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_providers/documents/publications_promotion/prd_ctrb118334.pdf

Otago Exercise Program

- **Otago** is an individually tailored program of muscle-strengthening and balance-retraining exercises of increasing difficulty, combined with a walking program. This extensively tested fall prevention program is now used worldwide.
- The program is delivered by an **Otago-trained PT** experienced in prescribing exercises for older adults.
- Visit: http://www.ncoa.org/improve-health/center-for-healthy-aging/falls-prevention/community-programs.html
- Otago is excellent for a homebound patient, one progressing from homebound status and just reaching out to the community, or for someone requiring one-on-one supervision and training. It would also be useful for the person not wanting a group program.
- Training for this program will soon be available on line for all PT's and PTA's at phConnect http://www.phconnect.org/group/otago-falls-prevention-exercise-program-forum

Stepping On©

- Stepping On is one of 4 evidence-based, fall prevention programs that is currently funded for dissemination and study in 3 states by the CDC.
- Stepping On is a 7-week series including one 2-hour class/week taught by peer leaders to groups of 8-12 older adults. Guest lectures are provided by PT, OT, PharmD's, and fire/police.
- The community-based classes include physical exercise, education, and facilitated group discussion to help promote behavioral changes needed to decrease fall risk.
- Participants should be able to walk independently (cane OK) and safely perform simple standing exercises.
- Learn more at Stepping On: http://ses.library.usyd.edu.au/bitstream/2123/3663/1/Stepping_On_FrontMatter.pdf
- Trained leaders will be provided with an excellent implementation guide.

Matter of Balance© (MOB)

- Matter of Balance is an 8-week, one 2-hour class/week, small group, evidence based fall prevention (EBFP) program which has been shown to decrease fear of falling.
- MOB also uses trained leaders and master trainers who are oftentimes older adults with education backgrounds.
- This is an excellent program for the person demonstrating heightened anxiety (high score on the MFES) about falling which appears to be limiting physical activity and/or community activity.
- The exercise component of MOB is primarily seated and can accommodate an older adult who is not yet ready for Stepping On; but is able to access a community-based class.
- For more information, visit: http://www.mainehealth.org/mh_body.cfm?id=432
- Having a staff member trained as an EBP trainer can bring clinic exposure and revenue while providing an enormous community service.

T'ai Chi: Moving for Better Balance

- Excellent for active older adults who are able to maintain unilateral stance > 5 seconds.
- Best program to follow Stepping On
- Available in many YMCA's
- Does not include an educational component
- Should be continued and/or followed with independent fitness programs
- Learn more at: http://www.taichiyogacenter.com/bio.html

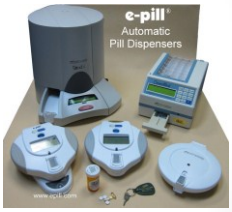
Medication Review

Fall risk increases significantly when one person is taking more than 4 daily prescription medications concurrently. This is known as **polypharmacy.**

- At least annually, patients should be seen for a detailed medication review with their PCP.
- When time is limited, consider a referral to a pharmacist for medication review. The national chain pharmacies, and many others, have software programs to expedite review of medication interactions.
- Patients need to call ahead to schedule a **pharmacist consultation** and bring ALL medications, supplements, and special dietary requirements along with them.
- Fall risk is sharply increased by use of many cardiac drugs and psychotropic medications. Whenever possible, these drugs should be decreased, especially with advancing age and decline in **pharmacodynamics**.
- Always rule out **orthostatic hypotension** and educate your patients about its risks.

Managing Medications Safely

- **Automatic medication dispensers** can help prevent accidental drug dosing errors.
- Many are even remotely monitored and will call a patient if a dose is missed.
- Medicare will cover cost if documented that this will avoid need for LTC. Speak with your intermediary.
- **Refer to nursing at home health services** to supervise, monitor side effects and refill these dispensers.



Vision Care

- Annual measurement of visual functions identify older people at risk of falls and hip fracture. Targeted intervention might have the potential of improving visual function and preventing falls in older people. (Abdelhafiz and Austin, 2003)
- **Annual eye exams are critical as we age.**
- **Impaired vision is an important and independent risk factor for falls.** Depth perception and distant-edge contrast sensitivity appear to be important for maintaining balance and detecting and avoiding falls. (Lord, 2001)
- Research shows that the **use of multifocal lenses by older adults increases fall risk.** Multifocal glasses might add to fall risk because the near-vision lenses impair distance-contrast sensitivity and depth perception in the lower visual field. Educate middle-aged patients about this upcoming risk. (Lord, 2001)

Vision Care

- Encourage use of **single vision lenses** beginning around age 60-65 targeting age 65-70 for adoption.
- Reading glasses should be placed near favorite reading spots.
- Computer glasses are not reading glass focal length.
- Ask PCPs to send out reminders for **annual eye doctor visits** that include dilation at least every 2 years.
- Advise use of **sunglasses** to protect eyes and reduce light sensitivity.

"Dizziness"

The clinical work-up for dizziness is too large a topic for this discussion. A few thoughts to keep in mind, consider, and rule out when dizziness is a complaint:

- Orthostatic hypotension
- Vertigo & vestibular issues
- Drug interactions as medications increase or clearance rates decrease
- Circulatory compromise to the brain (carotid and/or vertebral)
- Low pO2 levels with activity
- Blood sugar fluctuations (?AODM)

- Dizziness was associated with an increased risk of falling. (Ekwall, 2009)
- Participants with vestibular dysfunction who were clinically symptomatic (ie, reported dizziness) had a 12-fold increase in the odds of falling. (Agrawal, 2009)
- Outcome measures indicating an increased fall risk were a positive falls history and the presence of orthostatic hypotension. (Ramdas, 2009)

Managing "Dizzy" Patients

- Remind PCPs to refer patient's with vertigo to ENT and/or PT
- Consider medication review for lightheadedness and/or orthostatic hypotension.
- R/O dehydration
- R/O low pO_2
- R/O medication mismanagement by patient

Assistive Device Use

- Older adults commonly self-prescribe assistive devices for a variety of reasons. Of 70 patients interviewed, only 71% of the assistive devices being used had been prescribed. (Brooks, 1994)
- A correctly prescribed, fit, and used assistive device may result in a lower fall risk; however, a self-prescribed, misfit, or inappropriate assistive device may result in a higher fall risk.
- PCP's noting that an assistive device is indicated (or is being used and was not prescribed) due to poor balance, gait deviations, weakness, and/or pain should refer their patients for a **PT evaluation.**

Social Activity

- Increased **social activity is protective for fall risk** and for depression in older adults. (Luukinen, 1996)
- Loss of driving almost always results in a significant decrease in social contact. Transportation arrangements must be coordinated.
- **Social worker referral** may be indicated to locate and educate the patient and family about accessible transportation and its funding.
- **Home assessments must include community accessibility** to assure that non-drivers are able to access their community safely. Are crosswalk timers long enough? Are curbs ramped?
- **Referral to Aging Services** is needed to locate appealing social activities.
- Rule out depression with the Geriatric Depression Scale (GDS) or Mood scale (part of FRAST)
- **Eldercare Locator can be found at http://www.eldercare.gov/Eldercare.NET/Public/Index.aspx**

Home Safety

- Educate PCPs that OT's and PT's are able to perform detailed and individualized home assessments.
- Rebuilding Together will help adapt homes of financially limited older adults to support successful aging in place. Visit http://www.rebuildingtogether.org/content/organization/map
- Begin speaking to patient's in their 50's about accessible housing to age in that has at least one bedroom, a full bathroom, the kitchen and an accessible entrance on the ground floor.
- Moves and remodels should be completed PRIOR to retirement.
- An inaccessible home can dictate nursing home use in case of illness or injury.

NATIONAL RESOURCE CENTER for Safe Aging

Simple Home Changes

- Clear **clutter**!
- Install **monitored fall alarm** systems, especially for people living alone.
- **Grab bars** near shower and toilet set up for the users.
- **Automatic night lights** lighting path to bathroom.
- Solid and reliable **handrails** on all stairs/steps.
- **Lights over steps** that work.
- **Leading edge of steps** marked with reflective tape or varied color.
- Please visit: http://www.eskaton.org/PDFs/Smart-Homes-Aging-In-Place-aahsa.pdf

Fear of Falling

- **Falls increase the fear of falling, and fear of falling increases fall risk.** (Boyd, 2009)
- In addition, fear of falling often leads to self-imposed **restriction of physical activity**, which further heightens fall risk. (Zijlstra, 2007)
- Fear of falling is oftentimes experienced even without a fall.
- Fear of falling is oftentimes not reported and/or even appreciated.
- Fear of falling can be objectively measured by the **Modified Falls Efficacy Scale (MFES)** which is administered with the FRAST. (Tinetti, 1990)

Managing Fear of Falling

- Assure your patient that this is very common and understandable, but can present increased fall risk.
- Begin physical activity in an environment that is perceived as safe.
- This might be a seated group or individual PT with one-to-one attention.
- Consider referring to **Matter of Balance**; shown to decrease fear of falling.
- Referral to social work and/or to an aging services provider may also be indicated.

Depression

- Depression has been shown to significantly increase fall risk in community-dwelling older adults. The occurrence and under-treatment of depression in later life is well documented. Geriatric depression may be misinterpreted as fatigue or dementia or simply misattributed to normal aging. (Whooley, 1999)
- The treatment of depression is, of course, multidimensional. In older adults don't forget to consider sleep disturbance, bowel/bladder frequency and urgency disturbing sleep or limiting social interaction, malnutrition, and lack of social interaction and/or support. (Anthony, 2010).
- Older Americans are disproportionately likely to die by suicide. See http://www.nimh.nih.gov/health/publications/older-adults-depression-and-suicide-facts-fact-sheet/index.shtml
- Risk factors associated with psychotropic drugs use in later life are well documented.
- **Consider referring older adults exhibiting signs of depression for social work support and intervention.**

Diminished Balance

Please ask your PCPs to refer all patients to PT who:

- Score high on the FRAST (5+) &/or TUG test (13 sec or more).
- Have had a recent functional decline due to illness, injury, surgery, &/or significant loss.
- Report a sense of poor balance.
- Limit their walking &/or physical activity.
- Appear unsteady.

PTs must then remember to use and refer patients to EBFPs as they prepare to D/C PT.

Falls: A Public Health Approach

Techniques to facilitate dissemination of fall risk assessments and fall prevention programs

Selling Your Local PCPs

- We ALL need to "sell" the need for global and proactive falls risk assessment and prevention
- We are trained and effective educators
- Behavioral change is difficult with very busy practitioners
- What motivators exist?
- Are you able to educate just one PCP each quarter?
- What are the potential "returns on your investment"?

Find the Toolkit from NCOA!

- **State Policy Toolkit for Advancing Fall Prevention: Select Resources**
- www.ncoa.org/fallspolicy

ncoa National Council on Aging

Why would PCPs use these measures?

- PQRS: The **Physician Quality Reporting Initiative** provides financial incentives to PCPs to assess fall risk; visit www.cms.hhs.gov/PQRS
- A falls risk assessment is a required element of the Welcome to Medicare examination (Initial Patient Preventive Physical Exam or IPPPE). A quick reference guide on "The ABCs of Providing the Initial Preventive Physical Examination" is available at https://www.cms.gov/MLNProducts/downloads/MPS_QRI_IPPE001a.pdf
- The Affordable Care Act provides for an Annual Wellness Visit (AWV), including Personalized Prevention Plan Services (PPPS) for Medicare beneficiaries as of January 1, 2011. The initial Annual Wellness Visit requires a review of individual functional level and safety (falls). For more information about the Annual Wellness Visit, its various components and billing information, see https://www.cms.gov/MLNMattersArticles/downloads/MM7079.pdf

Learn to bill for Falls

- **The Falls V-code: V15.88 Other personal history, History of fall**
- V codes are part of ICD-9-CM. They are a "supplementary classification of factors influencing health status and contact with health services.
- V codes are used on occasions when circumstances other than a disease or injury are recorded as diagnoses or problems." V15.88 is defined as: History of fall, At risk for falling. V15.88 may be used for encounters where a fall or falls risk is addressed, including encounters where a falling or falls risk is the primary reason the patient presents for care, even if the factor(s) contributing to falling has not been established.
- The code be may listed first or may be listed as one of multiple conditions co-existing at the time of the encounter and requiring or affecting patient care, treatment or management. http://health-information.advanceweb.com/Web-Extras/CCS-Prep/V-Codes-How-When-to-Assign-Them.aspx

Medicare Intermediaries Differ

- Check with your local Medicare claims processing contractor to determine whether the falls V code can be used as a first listed diagnosis on claims.
- Palmetto GBA, a Medicare Administrative Contractor, explicitly recognizes V15.88 in its outpatient occupational therapy and outpatient physical therapy local coverage policies.
- Other Medicare Administrative Contractors and Medicare Advantage plans may differ.

Wrapping Up!

- Ask ALL older adults about falls at each visit.
- Annually, have all older adults complete a multifactorial fall risk assessment (FRAST or STEADI) and follow-up with interventions as indicated.
- Call or schedule follow-up visits to be sure interventions occurred and if they were helpful.
- Use and learn to offer EBFPs such as Otago, Stepping On, Matter of Balance, T'ai chi: Moving for Better Balance to decrease fall risk.
- Find safe, effective, long-term fitness classes for your older adult patients and try to motivate them to participate regularly.
- Remember that annual vision care, medication reviews, and home safety reviews are all critical to helping your older adults age successfully at home.
- Be proactive in bringing evidence-based fall prevention programs to YOUR area for YOUR patients.
- **TEACH your area PCPs about fall risk and prevention!**

Questions and Discussion

Thank You!

Please feel free to contact me:

- Mindy Oxman Renfro, PT, PhD, DPT, GCS, CPH
  Phone: (406) 243-2429
  Email: mindy.renfro@umontana.edu
  University of Montana
  School of Physical Therapy Skaggs 107
  32 Campus Drive
  Missoula, MT 59812

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